



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

September 15, 2006

### **H.R. 5252** **Communications Act of 2006**

*As ordered reported by the Senate Committee on Commerce, Science, and Transportation  
on June 28, 2006*

#### **SUMMARY**

H.R. 5252 would make numerous changes to provisions of current law that regulate telecommunications. The act would direct how local governments may issue franchises to providers of video service. The act also would create a new program in the Universal Service Fund (USF) to support the development of broadband service to unserved areas and make other changes to existing USF programs. H.R. 5252 also would authorize the appropriation of \$250 million over the 2007-2011 period for research grants on advanced communication services.

CBO estimates that enacting H.R. 5252 would increase direct spending by \$5.2 billion over the 2007-2016 time period. Over the same period, CBO estimates that revenues would increase by \$5.0 billion. In addition, assuming appropriation of the authorized amounts, CBO estimates that implementing H.R. 5252 would result in discretionary outlays of \$175 million over the 2007-2011 period.

H.R. 5252 contains several intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA). In particular, the act would limit certain intergovernmental entities from imposing certain fees on providers of cable services, permanently extend a prohibition on certain state and local taxation of Internet access services, and impose a three-year moratorium on certain new state and local taxes that apply to mobile telephone service. The act also would eliminate the rights of certain state and local governments to appeal and bring court cases relating to the Internet-based telephone service known as Voice-over-Internet-Protocol (VOIP). Other provisions of the act would preempt state and local laws and require certain intergovernmental entities to notify and file reports with the Federal Communications Commission (FCC).

CBO estimates that the net direct costs of these mandates to state and local governments would exceed the threshold established in UMRA (\$64 million in 2006, adjusted annually for inflation) in at least one of the first five years after enactment. Those costs, in the form of forgone revenues, would peak during the 2008-2009 period, and total at least \$150 million—and perhaps as high as \$400 million—in those two years. Costs would decrease after 2009 but would likely remain above \$100 million through 2011.

H.R. 5252 also would impose numerous private-sector mandates as defined in UMRA on providers of telecommunications services, Internet Protocol-enabled (IP-enabled) voice services, Internet service providers, manufacturers and distributors of television receivers, broadcasters, video and satellite service providers, and others. At the same time, the act would provide some forms of regulatory and tax relief for portions of those industries. Based on information from government and industry sources, CBO estimates that the aggregate costs of complying with the mandates in H.R. 5252 would exceed the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation).

## **ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary impact of H.R. 5252 is shown in the following table. The costs of this legislation fall within budget functions 370 (commerce and housing credit), 250 (science, space, and technology), and 950 (undistributed offsetting receipts).

## **BASIS OF ESTIMATE**

For this estimate, CBO assumes that the act will be enacted early in fiscal year 2007 and that the necessary amounts will be appropriated near the start of each fiscal year. Outlay estimates are based on historical spending patterns for existing or similar programs. CBO estimates that enacting H.R. 5252 would increase direct spending by \$5.2 billion over the 2007-2016 period and increase revenues by \$5.0 billion over the same period. In addition, assuming appropriation of the amounts authorized, CBO estimates that implementing H.R. 5252 would result in discretionary outlays of \$175 million over the 2007-2011 period.

By Fiscal Year, in Millions of Dollars										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>CHANGES IN DIRECT SPENDING</b>										
Universal Service Fund Provisions										
Antideficiency Act Exemption										
Estimated Budget Authority	0	0	0	0	0	0	0	0	0	0
Estimated Outlays	0	107	47	3	2	1	0	0	0	0
Broadband Service Fund										
Estimated Budget Authority	70	400	500	500	500	500	500	500	500	500
Estimated Outlays	0	426	513	500	500	500	500	500	500	500
Audits										
Estimated Budget Authority	20	40	41	42	42	43	44	45	46	47
Estimated Outlays	19	39	41	42	42	43	44	45	46	47
Rural Health Care Program										
Estimated Budget Authority	5	8	13	13	13	13	13	14	14	14
Estimated Outlays	0	8	12	13	13	13	13	14	14	14
Unlicensed Use of Television										
Broadband Spectrum										
Estimated Budget Authority	0	25	0	0	50	25	0	0	0	0
Estimated Outlays	0	25	0	0	50	25	0	0	0	0
Total Changes										
Estimated Budget Authority	95	473	554	555	605	580	557	559	560	561
Estimated Outlays	19	605	613	558	607	581	557	559	560	561
<b>CHANGES IN REVENUES</b>										
Estimated Revenues	95	448	553	554	555	556	558	559	560	561
<b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b>										
Authorization Level	40	45	50	55	60	0	0	0	0	0
Estimated Outlays	9	28	39	47	52	43	17	6	2	1

## Direct Spending

Several provisions of H.R. 5252 would affect direct spending. Title II would expand or create new programs in the Universal Service Fund. Title VI would modify terms and conditions governing the use of certain radio frequencies by users without licenses from the FCC.

**Universal Service Fund.** Created by the Telecommunications Act of 1996, the USF redistributes income from interstate telecommunications carriers to other carriers providing services to high-cost areas, low-income households, schools, libraries, and nonprofit rural health care providers. The cash flows from the USF appear in the budget as revenues (for fund collections, discussed below) and direct spending (for amounts distributed from the fund).

Title II would create new programs within the Universal Service Fund, expand an existing program, and permanently exempt the fund from the provisions of the Antideficiency Act. CBO estimates that enacting these provisions would increase direct spending by about \$5.1 billion over the 2007-2016 period and increase revenue collections by \$5.0 billion over the same period.

*Antideficiency Act Exemption.* Section 211 would permanently exempt the Schools and Library program with the USF from provisions of the Antideficiency Act. Under current law, the program has a temporary exemption from the act that will expire at the end of calendar year 2006. Without this exemption, the Schools and Library program would be unable to obligate funds until sufficient resources to meet its obligation are available.

The Schools and Libraries program distributes funds to eligible institutions to provide affordable Internet and telecommunications services. When the USF receives and approves a grant application, it obligates funds to be paid to the recipient pending compliance with certain grant conditions. Under current law, the fund has temporary authority to obligate funds without sufficient amounts available to meet those obligations. H.R. 5252 would make that authority permanent, allowing the program to obligate and spend funds faster than it would without the exemption. CBO estimates that this provision would increase the rate of spending and thus increase costs by about \$160 million over the 2007-2016 period.

*Broadband Service Fund.* Section 252 would create a new program to promote the development of broadband service in areas of the United States that the FCC determines to be unserved. The program would provide financial assistance for certain broadband service providers to install equipment and infrastructure to offer broadband service in certain areas. H.R. 5252 would limit the amount that could be obligated under this program to \$500 million per year. Based on the administration of existing USF programs, CBO expects that the proposed Broadband Service Fund would operate at the maximum authorized level. CBO estimates that this provision would increase direct spending by nearly \$4.5 billion over the 2007-2016 period. (The provision also would increase revenue collections by about \$4.5 billion over the same period.)

*Audits.* Section 258 would require the FCC to periodically audit entities that receive funds from the Universal Service Fund, as well as communications carriers who contribute to the fund. The audits would be administered by the Universal Service Administrative Company to determine how recipients use the support received from the fund and how costs of services provided by fund contributors differ between service areas. Based on information from the FCC about the cost of audits, CBO estimates that this provision would increase the expenses (and revenue collections) of the fund by about \$400 million over the 2007-2016 period.

*Rural Health Care Program.* Section 260 would expand the population of eligible health care providers that could receive support under the Rural Health Care Support Program. This program provides reduced rates for Internet and telecommunication services to certain rural public and nonprofit health care providers. H.R. 5252 would increase the pool of eligible health care providers to include critical access hospitals, hospice providers, school health clinics, and others. CBO estimates that this provision would increase direct spending by about \$115 million over the 2007-2016 period (and result in increased revenue collections of \$120 million over the same period).

**Unlicensed Use of Television Broadcast Spectrum.** Title VI would modify the FCC's policies regarding the use of television broadcast spectrum by unlicensed devices. The commission's recently announced timetable for unlicensed use of those frequencies set a goal of having equipment deployed after the transition to digital television is completed in 2009. Under the FCC's plan, such devices could operate on a secondary basis on most of the frequencies spanning channels 5 through 51. This act would modify that plan by directing the FCC to allow certified unlicensed devices to begin operating on channels 2 through 51 beginning within 270 days after the act is enacted, subject to certain limitations. CBO estimates that enacting H.R. 5252 would reduce offsetting receipts from future spectrum auction proceeds by \$100 million over the 2009-2012 period, relative to current law.

CBO anticipates that allowing unlicensed devices on channels 2 through 4 would result in fewer channels being auctioned for new broadcast stations relative to current law, thereby reducing offsetting receipts by an estimated \$75 million by 2012. Although unlicensed devices would operate on a secondary basis, experience suggests that the presence of such incumbents would put pressure on the FCC to limit the number of new licensees in the broadcast bands. CBO expects that this impact would be most pronounced in major markets because the relative scarcity of spectrum in those areas. For this estimate, CBO assumes that enacting this act would result in a 50 percent reduction in the \$150 million CBO projects otherwise would be collected from auctions of licenses for those channels.

In addition, CBO expects that allowing unlicensed operations on channels 2 through 4 would reduce demand for some of the licenses scheduled to be offered by the FCC in 2008 as part of the "700 megahertz" auction. The impact on that auction is likely to be small, however,

because of the significant engineering constraints on use of those channels by secondary devices. For this estimate, CBO assumes that those three channels could serve as a substitute for only 20 percent of the licenses being auctioned, and that the effect on the value of those licenses would fall by no more than 1 percent. Based on CBO's baseline projection of receipts from that auction, which totals \$12.5 billion, the net impact of this act on the 700 megahertz auction would total about \$25 million.

## **Revenues**

As noted above, assessments made by the Universal Service Fund to support its programs are recorded in the budget as revenues, and are calculated to generate an amount sufficient to cover the costs of the fund. All USF spending is supported by assessments on telecommunications firms; thus, CBO estimates that new revenues collected by the fund to support the proposed Broadband Service program, program audits, and the expansion of the Rural Health Care program would total \$5.0 billion over the 2007-2016 period.

Several provisions of the act could increase federal revenues as a result of the collection of additional civil and forfeiture penalties assessed for violations of FCC laws and regulations. Collections of civil penalties and forfeiture penalties are recorded in the budget as revenues. CBO estimates that any additional revenues that would result from enacting H.R. 5252 would not be significant because of the relatively small number of cases likely to be involved.

## **Spending Subject to Appropriation**

Title X would establish a program within the National Science Foundation (NSF) to support basic research in advanced information and communications technology. The NSF would make grants designed to improve the availability and affordability of advanced communications services to higher education and nonprofit research institutions. The act would authorize the appropriation of \$250 million over the 2007-2011 period for this grant program. Based on the spending patterns of similar programs, CBO estimates that outlays over this period would total \$175 million.

Title X would create two new administrative offices at the FCC—the Office of Indian Affairs and the Office of Consumer Advocate. Other provisions of the act would require the FCC to undertake numerous rulemakings regarding the USF Broadband program, video service and cable franchising, consumer protection requirements for mobile services, and appropriate use of Caller-ID services, among others. The act would also require the FCC to prepare a number of reports for the Congress concerning the availability of video services, proposals

to allow radio and television content to be broadcast in school buses, the availability of broadband service, and the impact of spectrum leasing rules. Based on information from the FCC, CBO estimates that these new requirements would cost about \$35 million over the 2007-2011 period. Under current law, the FCC is authorized to collect fees from the telecommunications industry sufficient to offset the cost of its regulatory and user information programs. CBO assumes that the additional costs of implementing these administrative provisions of H.R. 5252 would be offset by an increase in collections credited to the FCC's annual appropriations and would have no significant net cost.

## **ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS**

H.R. 5252 contains several intergovernmental mandates as defined in UMRA. Specifically, the act would:

- Limit the fees that intergovernmental entities—primarily municipal governments—may impose on providers of cable services;
- Permanently extend a prohibition on certain state and local taxes on the provision of certain Internet access services;
- Impose a three-year moratorium on certain new state and local taxes that apply to mobile telephone service;
- Prohibit intergovernmental entities—primarily municipal governments—from imposing certain requirements on providers of cable services and from negotiating future changes in franchise agreements including, the structure of franchise fee payments and the number of public, educational, and governmental (PEG) channels provided by the video service provider;
- Eliminate appeals regarding two recent FCC decisions that relate to an Internet-based telephone service known as VOIP;
- Preempt state laws that prohibit municipal governments from providing services for Internet access;
- Preempt a variety of other state and local laws with respect to the granting of franchises for cable service, consumer protection, caller-ID, and certain requirements that information be available to the public;

- Require local franchise authorities to adhere to certain time lines for granting franchises; and
- Require certain state and local government entities to notify and file reports with the FCC.

CBO estimates that the net direct costs of these mandates to state and local governments would exceed the threshold established in UMRA (\$64 million in 2006, adjusted annually for inflation) in at least one of the first five years after enactment. Those costs, in the form of forgone revenues, would peak during the 2008-2009 period and total at least \$150 million—and perhaps as high as \$400 million—in each of those two years. Costs would decrease after 2009 but would likely remain above \$100 million through 2011. Most of those costs would stem from the first three provisions outlined above. The following discussion focuses on the costs of these provisions.

### **Estimated Direct Costs of Mandates to State and Local Governments**

UMRA includes in its definition of the direct costs of a mandate the amounts that state and local governments would be prohibited from raising in revenues to comply with that mandate. The most significant direct costs of H.R. 5252 would be the revenues that state and local governments would likely collect under current law from providers of video service, Internet access services, and mobile phone service but would be precluded from collecting under H.R. 5252.

**Limiting Fees Paid by Providers of Video Service.** Title III would establish new provisions for the franchising of video service providers. In doing so, the act would place requirements on certain units of local government, preempt their authority to regulate and negotiate with video service providers, and prohibit some state and local governments from charging certain fees to providers of video services. The act also would prohibit certain local governments from imposing franchise fees on services delivered using certain technologies. At the same time, by increasing competition in some markets, enacting the act likely would lead to more people subscribing to cable services that are subject to local franchise fees. Thus, local governments would gain new revenues that partially offset these costs.

Under current law, Local Franchise Authorities (LFAs) in most states negotiate compensation with cable providers seeking to serve their franchise area. (In at least four states, the law provides for a statewide franchise). Each agreement is different, and the amount of forgone revenue from H.R. 5252's prohibition would depend on the specifics of each franchise agreement preempted by the act.



Current federal law caps fees for the franchise at 5 percent of gross revenues—a fee maintained in H.R. 5252. Local governments, however, also negotiate fees for certain additional services that the video service provider must supply. These services include public, educational, and governmental programming and a type of private network for some public entities called an institutional network (INET). INETs typically connect schools, police and fire stations, libraries, and other municipal buildings. On average, these fees total between 1 percent and 3 percent of the gross revenues of the provider. Based on the franchise agreement that an LFA has with cable provider, provisions of H.R. 5252 would limit fees that those LFAs with an INET may charge video providers. There is a great deal of uncertainty as to the number of franchise areas with INETs, but government sources suggest that no more than half of franchise areas have one.

By prohibiting some intergovernmental entities from charging certain video service providers more than 1 percent of gross revenues to provide PEG programming and other services, H.R. 5252 would lead to a loss in state and local revenues. CBO estimates that the net costs of this prohibition—that is, the amount of revenues state and local governments would no longer be able to collect, offset by franchise fees generated from increased competition—could total about \$100 million in some years during the 2007-2011 period. Such costs, however, could be significantly lower, depending on the pace at which there is competition in the market for video services and the changes in technology for the delivery of such services.

**Permanent Extension of the Internet Tax Freedom Act.** Section 1013 would permanently extend the moratorium on certain state and local taxation of Internet access and would eliminate an exception to that prohibition that allows certain states to continue collecting such taxes. Under current law, the moratorium is set to expire on November 1, 2007.

The Internet Tax Freedom Act (ITFA) currently prohibits state and local governments from imposing taxes on Internet access until November 1, 2007. Based on information from government and industry sources, CBO estimates that permanently extending the ITFA would result in revenue losses for about 25 states and some local governments totaling between \$100 million and \$175 million, annually, beginning in November 2007. CBO expects that forgone revenues from this provision would peak within the next few years and then decline due to the rapidly decreasing prices for services that could have been subject to tax in the absence of this provision and the relatively slower growth of new subscribers.

**Moratorium on New Taxes on Cell Phone Services.** Title XII would impose a three-year moratorium on certain new taxes imposed by state and local governments that apply to the provision of mobile telephone service. State and local governments would be prohibited from raising the tax rate on current taxes and from enacting any new statutes that would

impose other taxes or fees on mobile telephone services over the next three years: 2007, 2008, and 2009.

There is significant uncertainty about the number of governments that would impose taxes in the absence of this legislation and the amount of revenue they would raise. Based on information from industry sources, however, CBO expects that many local governments likely would act to either raise current tax rates or impose new taxes on mobile telephone services. Over the past five years, subscribers to mobile phone services have been increasing by more than 10 percent annually. At the same time, consumer expenditures for and use of traditional wireline phones has decreased. State and local governments have traditionally taxed such telephone services and these market forces have had a negative impact on state and local tax collections. It is likely that at least some of these governments that have not already moved to recoup those revenue losses would do so in the absence of this legislation.

While it is difficult to predict what state and local governments would do in the absence of the moratorium, based on governmental and industry sources, CBO estimates that, in aggregate, they would likely forgo between \$100 million and \$150 million annually in each of the three years the moratorium would be in effect.

## **ESTIMATED IMPACT ON THE PRIVATE SECTOR**

H.R. 5252 would impose numerous private-sector mandates as defined in UMRA on providers of telecommunications services, IP-enabled voice services, Internet service providers, manufacturers and distributors of television receivers, broadcasters, video and satellite service providers, and others. At the same time, the act would provide some forms of regulatory and tax relief for portions of those industries. Based on information from government and industry sources, CBO estimates that the aggregate costs of complying with the mandates in H.R. 5252 would exceed the annual threshold established by UMRA for private-sector mandates (\$128 million in 2006, adjusted annually for inflation).

The major provisions of the act would impose private-sector mandates by:

- Imposing new standards for multimode devices;
- Increasing payments by telephone companies to the Universal Service Fund;
- Imposing new regulations on interconnections among providers of telephone services;

- Imposing new requirements on video service providers regarding franchise applications, interconnection with other providers, reporting and termination fees;
- Regulating video content by:
  - Requiring satellite carriers to serve subscribers in Alaska and Hawaii;
  - Requiring manufacturers to include output control technologies in their products that receive over-the-air digital broadcasts; and
  - Making changes to certain FCC licenses related to transmissions on digital technologies;
- Requiring broadcasters and retailers to use various methods to educate consumers about the transition to digital broadcasts;
- Imposing energy standards on digital converter boxes;
- Requiring cable companies to carry analog video streams;
- Requiring broadcasters and multiple-channel video programming distributors to provide video description for the blind;
- Requiring video service providers to prevent easy access to certain commercial matter during the broadcast of children's programming;
- Requiring Internet service providers to meet consumer protection guidelines;
- Prohibiting the transmission of false or misleading information over caller-ID services; and
- Requiring some providers to comply with reporting requirements, customer service and consumer protection requirements, as well as other incremental changes in industry regulations.

Based on its review of the legislation, CBO expects that the mandates contained in the titles on Interoperability (title I); Universal Service Reform and Interconnection (title II), Video Franchising (title III), Video Content (title IV), Digital Television (title VII), Protecting Children (VIII), Internet Consumer Bill of Rights (title IX) and Truth in Caller ID (title XIII) would have the greatest cost to private-sector entities as defined in UMRA. What follows is a summary of the major provisions related to private-sector mandates.

## **Interoperability: Standards for Multimode Devices**

Section 151 contains a mandate on manufacturers of multimode devices. Multimode devices, as the term is used in the act, refers to cell phones that contain multiple transmitters, for example a “Wi-Fi” or “Bluetooth” transmitter. Manufacturers of such devices would be required to meet standards governing the acceptable level of radio frequency exposure. The cost of complying with this mandate would depend on the regulations to be issued by the FCC.

## **Universal Service Fund**

**Contributions to the Universal Service Fund.** Section 211 would impose mandates on all communications service providers. The Universal Service Fund helps to underwrite telephone service predominantly for rural and low-income customers. The act would require the FCC to develop a new contribution system and require all telecommunications companies—including Internet phone companies and broadband providers that currently do not contribute to universal service support—to make payments to the fund. Under current law, providers must pay fees into the USF on revenues received from providing interstate telecommunication service; revenues from intrastate services are exempt. This section would expand the base from which fees are derived for universal service to all forms of revenues. In the aggregate, the level of universal service fees is determined by the spending by the USF.

**Fee Increases to the Universal Service Fund.** Section 252 would establish a new program (the Broadband for Unserved Areas Program) funded by the Universal Service Fund to encourage the deployment of high-speed Internet access in unserved rural areas. The program would consist of grants distributed on a competitive basis and be administered by the Universal Service Administrative Company. The act would cap spending for these grants at \$500 million per year with unobligated balances used to support universal service more generally.

To pay for the program, the FCC would have to raise universal service fees on telecommunications carriers since, under section 254(d) of the Communications Act, universal service fees have to be sufficient to preserve universal service and this new program is to be funded under section 254(d). CBO estimates that the additional fees collected for this program would exceed \$400 million from fiscal 2008 onward.

Section 260 would increase the number of categories of rural health care providers eligible for subsidies under the Rural Health Care program of the Universal Service Fund. CBO

estimates that these added fees will cost the industry roughly \$10 million annually beginning in 2008.

## **Regulation of Interconnection**

Section 213 would prohibit an incumbent telephone service provider from refusing to interconnect and carry the traffic of another carrier merely because the second provider is an IP-enabled carrier. Additionally, this section would eliminate the current exemption on IP-enabled voice carriers from “paying compensation for interstate traffic owed to another provider or carrier solely on the basis that such traffic is IP-enabled . . . ” Based on information from government and industry sources, the incremental cost of making interconnection available to IP-enabled carriers would be minimal. Secondly, this section would require IP-enabled voice carriers to pay all the traffic-related access charges that other telephone service providers currently must pay. According to industry estimates, IP-enabled telephone providers would pay about \$200 million in such access charges in 2007 and increasing amounts thereafter. Those payments would be made to other telephone companies that are currently required to pay such charges and would represent within-industry transfers.

Section 213 would require IP-enabled telephone providers to notify customers detailing the customer’s responsibility for ensuring access to emergency services. According to industry sources, the cost to provide such notices would be small.

Section 257 would require voice communications providers to label traffic with sufficient information to allow for traffic identification by other communication networks that transport, transit, or terminate such traffic, including information on the identity of the originating provider, the calling and called parties. Currently, identifying information is often lost as traffic is passed from network to network. Without identifying information the carrier completing the call can not identify the carrier originating the call and collect payment for the service of completing the call. CBO has no basis to estimate the cost of this labeling requirement.

## **Regulation of the Video Services Franchising Process**

**Regulation of Franchise Agreements.** Section 312 would require video service providers to use a standard application form when applying for a new franchise. The form would require no additional information compared to the information applicants currently provide to a franchise authority during the application process. Consequently, this mandate should impose no new costs.

Section 331 would establish requirements for franchise agreements and place limits on the fees and contributions that video service providers have to make under such agreements. The act would on average lower the fees franchisees currently have to pay. The section does permit the parties to negotiate tradeoffs between the franchise fees and the PEG contributions. Furthermore, under the legislation franchising authorities could no longer require a video service provider to construct a new institutional computer network. (Such networks are typically used by public agencies or enterprises.)

Section 337 would prohibit discrimination by video service providers against potential subscribers on the basis of the race, religion, or income of that group. Discrimination based on race or religion is currently prohibited under law. The act would impose a mandate by prohibiting video service providers from discriminating based on income. Existing franchise agreements tend to have build-out requirements, requiring the franchisee to serve all households in areas where the minimum population density is above a certain threshold. But until now the franchises were required to cover the entire area under the jurisdiction of the franchising authority. Under the act, since the applicants would be able to define their service area, video service providers could serve only portions of a community. While economic redlining typically occurs in non-network goods, such as housing, some companies may try to serve only areas with relatively higher incomes. The act would prohibit such actions. CBO has no basis to estimate the prevalence of such economic discrimination in the absence of this legislation, nor the cost of ending such discrimination.

**Interconnection.** Section 333 would require multiple video service providers that serve a single franchise area to interconnect to transmit the public, educational, or governmental use channels without material degradation. If the video service providers cannot come to terms voluntarily on how to implement this requirement, they would have to comply with regulations issued by the FCC regarding interconnecting and cost-sharing. Estimates of the costs of these connections vary between \$5 million and \$30 million annually, depending on the number of new franchises. In addition, the installation of interconnection equipment could add another 10 percent to that cost in a one-time expense.

**Reporting Requirements for Video Service Providers.** Section 315 would require companies to provide an annual report to the FCC on the family tiers—packages of channels free of obscene and indecent programming—the company offers, the prices, marketing efforts and subscription levels of such family tiers. Such a report would impose low costs on the companies.

In addition, at the request of the franchise authority, the video service providers would have to make their books and records available for periodic audits. Such a request would not impose substantial cost upon the video service provider directly.

**Prohibition on Early Termination Fees.** Section 336 would amend the Communications Act to make it “unlawful for a video service provider to charge a subscriber an amount in excess of one month’s subscription fee as a penalty or service charge for terminating a subscription to the video service provider’s service before the date on which the subscription term ends.” CBO interprets this language to include only the service or penalty fee, and not any fee for missing or damaged equipment, which would not be a service fee.

Many video service providers have year-long agreements with penalty fees for early termination. This provision is not retroactive so it would not affect existing contracts. The cable companies have already acquired their customers, paid for their investment and are willing to concentrate on offering month-to-month contracts. (Satellite companies are exempt.) This provision would mostly affect over-builders: that is, companies entering into the territory of an existing cable franchise. Such companies often have early termination clauses in their service agreements. Based on information from industry sources, CBO estimates that limiting these clauses would cost such new companies about \$10 million to \$12 million annually over the next five years.

## **Regulation of Video Content**

**Satellite Services.** Section 401 would expand the requirements on current satellite carriers and service resellers to provide service to subscribers in Alaska and Hawaii that is comparable to what they provide in the contiguous United States. This section also would require that each satellite for which a future license is to be used “for service in the contiguous United States” for direct-to-home video services or for any other direct-to-consumer service satisfy capability requirements. (Those requirements would be stated in terms of earthbound signal strength and satellite reception for providing service to Alaska and Hawaii.) Both the specific satellite capability requirements as well as the extent of the corresponding service provision (that is, to large cities in Alaska and Hawaii or to the entirety of each state) varies by type of satellite service. According to industry sources, the cost to comply with this provision would increase the cost of a satellite carrier to comply with a license by about 15 percent.

**Digital Content Protection.** Sections 452 and 454 would authorize and ratify earlier FCC Reports and Orders mandating the use of output control technologies (“broadcast flags”) and approving—based on interim criteria—a specific set of technologies for that purpose. As a result, those sections would impose several mandates on the private sector. In particular, section 452 would require that an approved output control technology be incorporated into television receivers, digital recording equipment, and certain other devices that directly or

indirectly receive over-the-air digital television broadcasts. Section 454 would require the commission to initiate a process that would impose similar controls on digital radio.

CBO expects that the costs to the private sector of complying with the broadcast flag requirement of section 452 would not exceed the annual threshold established in UMRA for private-sector mandates because the expense of complying with it is limited by the several factors, including: (i) the approved output control technologies have already been implemented in microelectronic components that are inexpensive to manufacture, avoiding thereby as well expensive design efforts for new chips; and (ii) the costs to license the intellectual property embodied in the approved output control technologies are limited to administrative fees. In contrast, the costs to implement the requirements of section 454 would depend on the outcome of FCC proceedings.

**Licensing Terms for Broadcast Flag Technologies.** Section 452(d)(3) would modify the terms under which the output control technologies approved in currently-signed licenses for some of the output control technologies considered in previous rulemaking by the FCC (FCC 03-273 - *In the Matter of Digital Broadcast Content Protection, Report and Order and Further Notice of Proposed Rulemaking*, November 4, 2003) and (FCC 04-193 - *In the Matter of Digital Output Protection Technology and Recording Method Certification*, Order, August 12, 2004 ). This section would thereby impose a private-sector mandate by requiring that licenses for approved output control technologies for equipment receiving over-the-air digital television broadcasts be modified to remove clauses which prevent licensees from asserting patent rights; otherwise, the associated technologies lose their approval. CBO has no basis to estimate the cost of this mandate.

**Compulsory License Terms and Conditions.** Section 453 would create compulsory licenses for certain parties that make use of digital audio broadcasts. It also would establish the conditions that such entities must satisfy in order to qualify for them. It thus would impose two mandates on the private sector requiring that:

- Organizations that monitor digital radio broadcasts or satellite transmissions, either for allocating royalties due to copyright owners or for providing other types of measurement services (e.g., for determining the frequency of news stories about Members of Congress) receive a free, or de minimus-cost license for “access(ing) and retransmit(ing) any content contained in such transmissions protected by copyright protection or similar technologies” in order to carry out their activities; and
- Organizations benefitting from such free or de minimus-cost licenses “employ reasonable methods to protect” the digital audio content they access under those licenses “from further distribution.”



CBO cannot estimate the cost to the private sector of these requirements. Currently, organizations making such use of audio broadcasts or transmissions that are affected through existing technology do not pay royalties, and do not incur substantial costs to protect that content. The two provisions of section 453 would effectively maintain a no-royalty regime under a new technology—digital audio—and private-sector sources cannot project either forgone royalties or additional costs of protecting the associated digital content.

### **Digital Television Education**

H.R. 5252 includes several provisions to educate consumers about the nation's transition to digital-only television broadcasting by February 2009. Section 701 would impose mandates by requiring manufacturers to put labels on all analog TV sets sold in the United States warning consumers of the pending analog switch off in February 2009. Section 701 also would require that a retailer of analog-only television sets that sells such television sets via direct mail, catalog, or electronic means to include in all advertisements or descriptions of such television set a warning about the transition to digital-only broadcasts. The cost of such labeling is likely to be minimal. Television sets already have printed packaging and screen labels. Changing these labels is not likely to be expensive.

Section 701 also would impose notification requirements on broadcasters for their public service announcements (PSAs). Each broadcast television licensee would be required to air two 30-second public service announcements each day for three months beginning December 2007 to inform consumers about the federally subsidized digital-to-analog converter box discount program. Beginning November 17, 2008, broadcasters would have to start running PSAs alerting consumers to the coming switch of analog broadcasts. Such public service announcements must be in English, Spanish, and other languages as appropriate.

CBO assumes that the broadcasters will be making many such announcements on their own to let their audience know of the shift in their broadcast frequency during the transition to digital television. CBO also assumes that the mandated public service announcements would replace other public service announcements during those periods. Consequently, CBO expects that this requirement for public service announcements would not impose substantial additional cost on broadcasters.

Section 701(b) requires the FCC to establish a consumer outreach plan, including a requirement that all the licensed broadcasters in a designated market area submit a joint plan to the FCC that addresses the public outreach and public service announcement requirements. This joint plan would include a description of how each broadcaster intends to fulfill the PSA

requirements, market research by each broadcaster regarding projected local consumer demand for converter boxes, and be shared with retailers in the area to help inform their stocking plans. CBO estimates that these requirements could be fulfilled at a small cost for each television market. The report to the FCC would be due July 15, 2007.

### **Energy Standards for Digital Television Converter Boxes**

Section 701 would require the Assistant Secretary of Commerce for Communication and Information, in consultation with the Secretary of Energy, to set the energy standards for digital-to-analog set-top converter boxes. The new standards would have to be set within one year of enactment. Under current law, the converter boxes are supposed to go on sale in January of 2008. If the energy standards do not go into effect until a year after passage, which would be October 2007 at earliest, the two-month gap would not give the supply chain sufficient time to stock the stores with the requisite boxes.

The energy standards themselves could lower the costs of the manufacturers of digital to analog set top converter boxes, if the national standards are lower than the standards set by various states that have such regulations. The cost of the mandate would depend on final rules set by the Department of Commerce.

### **Carriage of Analog Video Streams**

Section 701(d) would require cable operators to carry both the original digital video stream as well as a downconverted analog version of it. The legislation would permit such downconversion declaring that it is not material degradation. The section also would permit the cable companies to convert high definition digital video streams into standard definition digital video streams. Cable companies with capacity of less than 550 megahertz are exempted from the requirement to carry both streams. The National Cable and Telecommunications Association has committed its members to carry both streams. Consequently, the industry is already implementing the policy. The mandate would become effective on the day that analog television transmissions cease.

### **Video Description Rule to Aid the Blind**

Section 702 would reinstate the video description rules of the FCC report and order entitled *Implementation of Video Description of Video Programming* (15 FCCR 15,230). Reinstating the provisions of that report and order would constitute a new mandate by requiring affiliates

of the top four commercial television broadcast networks in the top 25 television markets to provide at least 50 hours per calendar quarter of prime time or children's programming with video description. This section also would require each multichannel video programming distributor (MVPD) with at least 50,000 subscribers to provide at least 50 hours per calendar quarter of prime time or children's programming with video description on each of the top five nationally distributed networks they carry. In addition, all broadcast stations and MVPDs with video description capability, regardless of market size, would be required to "pass through" any video description received from network programs they distribute. According to data from the FCC, more than 80 percent of broadcast affiliates and almost 70 percent of MVPDs in their top 25 respective markets possessed video description capability by the year 2000. Based on information from government sources, CBO estimates that the incremental cost to the industry of implementing the mandates in section 702 would not exceed \$15 million annually over the next five years.

## **Protecting Children**

Title VIII would impose a mandate on video service providers by requiring them to follow new guidelines to be established by FCC to prevent the offering of child pornography. The cost of this mandate would depend on the regulations established by FCC. Further, this title would make it the responsibility of video service providers, as well as cable operators, multichannel video programming distributors, satellite carriers, providers of over-the-air broadcast programming, and broadband providers to prevent interactivity with commercial matter during the broadcast of any children's programming. The mandate would take effect immediately. And finally, this title contains a mandate on owners and operators of commercial websites that contain "sexually explicit" materials. Owners of these sites would be required to comply with new requirements to be set by the FTC. The cost of complying with these mandates would depend on the results of future rulemaking.

## **Consumer Internet Bill of Rights**

Section 903 contains a Consumer Internet Bill of Rights that would direct Internet service providers to allow subscribers to access and post lawful content, access the web pages of the consumers' choosing, run any applications of the consumers' choosing, connect any legal device to the network, and receive "clear and conspicuous" information about connection speeds, capabilities, and pricing. At present, most if not all Internet service providers provide the access required by this section. This mandate would preempt businesses from changing their current practices. Consequently, these rights could be provided at little cost to the Internet service providers.

In addition, section 905 would require Internet service providers to offer high-speed Internet services without requiring consumers to also subscribe to additional telecommunications services. Currently, most Internet service providers and cable companies offer stand-alone Internet access. Phone companies are also offering stand-alone packages in their fiber-optic offerings. Similarly, most wireless companies that are in the process of rolling out Internet access also offer stand-alone versions of the service. Such service may require purchase of special cards to use with computers. Because the industry is largely moving in this direction, the incremental cost to comply with this mandate would be relatively small.

### **Truth in Caller-ID**

By prohibiting certain transmissions of caller-ID information, section 1302 contains a mandate on persons who would legitimately need to transmit such information. This section would make it illegal to transmit misleading or inaccurate caller-ID information, but would require the FCC to promulgate regulations to implement this section. The FCC would have the discretion to exempt “legitimate” reasons to transmit false caller-ID information (for example, battered women’s shelters). The cost of complying with this mandate, if any, would depend on the regulations established by the FCC.

### **PREVIOUS CBO ESTIMATE**

On May 3, 2006, CBO transmitted a cost estimate for H.R. 5252, the Communications Opportunity, Promotion, and Enhancement Act of 2006, as ordered reported by the House Committee on Energy and Commerce on April 27, 2006. That version of the legislation did not contain provisions to add or change Universal Service Fund programs or permit the use of unlicensed radio spectrum. The House version contained a broader provision to cap certain fees charged by local franchising authorities, which would result in net revenue losses to those entities totaling between \$100 million and \$350 million annually by 2011. Further, the House legislation did not contain the moratorium on new taxes placed on mobile telephone services or the permanent extension of the Internet Tax Freedom Act. CBO’s cost estimates reflect the different provisions in the two versions of H.R. 5252.

The Senate version of H.R. 5252 has a provision in common with the House version of the act. Both versions of the legislation would require Internet service providers to offer stand-alone Internet service—broadband in the House version and the highest Internet access speed offered in the case of the Senate version. In both instances, CBO noted that most of the Internet service providers already offered stand-alone service, and thus, that the likely cost of that private-sector mandate would be low.

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